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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,623	05/01/2006	Christophe Colignon	LAV0313157	3658

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EXAMINER	
EDWARDS, LOREN C	

ART UNIT	PAPER NUMBER
3748	

MAIL DATE	DELIVERY MODE
05/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/595,623	COLIGNON, CHRISTOPHE	
	Examiner	Art Unit	
	LOREN C. EDWARDS	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 March 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/23/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. An Applicant's Amendment filed on 4/23/08 has been entered. Claim 1 has been amended; and claims 8-14 have been added. Overall, claims 1-14 are pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 7, 8-10, and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Carberry et al. (U.S. 6,598,387). Carberry discloses a system for providing assistance in regenerating depollution means associated with oxidation catalyst-forming means (Fig. 1, No. 46) integrated in an exhaust line of a motor vehicle diesel engine, and in which the engine is associated with common rail means (Col. 3, Lines 34-50) for feeding fuel to the cylinders of the engine and adapted, at constant torque, to implement a strategy of regeneration by injecting fuel into the cylinders in at least one post-injection (Col. 3, Line 53 - Col. 4, Line 17), the system comprising: means for detecting a request for regeneration (Col. 5, Lines 25-62), and thus for post-injection; means for detecting a stage in which the vehicle accelerator pedal is being raised and for detecting a stage in which the vehicle engine is idling (Col. 6, Lines 37-63); acquisition means for acquiring the temperature downstream from the catalyst-forming means (Fig. 1, No. 42); means for responding to the temperature to determine a

maximum duration of post-injection application during stages in which the engine is returning to idling as a result of the accelerator pedal being raised and stages during which the engine is idling (Fig. 3; Col. 7, Lines 3-42); and means for immediately interrupting the or each post-injection if the duration of post-injection utilization reaches the predetermined maximum duration of application during a stage of returning to idling (Fig. 3; Col. 7, Lines 38-42), and for progressively reducing the or each post-injection when the duration of pos-injection utilization reaches the predetermined maximum duration of application during a stage of the engine idling.

4. With regards to claim 2, Carberry discloses the system of claim 1, as described above, and further wherein the reduction means are adapted to reduce the or each post-injection in application of a calibratable slope (Fig. 3).

5. With regards to claim 3, Carberry discloses the system of claim 1, as described above, and further wherein the depollution means comprises a particle filter (Fig. 1, No. 48).

6. With regards to claim 7, Carberry discloses the system of claim 1, as described above, and further wherein the engine is associated with a turbocharger (Fig. 1, No. 26).

7. With regards to claims 8-10, and 14, Carberry discloses the system of claims 1-3, and 7, as described above, which contain all of the essential elements of the instant claims. The method to so perform is inherently included.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 4-6, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carberry in view of Rao (U.S. 4,655,037). Regarding claims 5 and 6, Carberry discloses the system of claim 1, as described above, but fails to specifically disclose wherein there is a fuel additive to assist with the regeneration of the particulate filter and which includes a NOx trap. Rao discloses a fuel additive for use in an internal combustion engine application (Rao; Abstract) that contains a NOx trap ingredient (metal oxide). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the fuel additive of Rao in the system of Carberry for the advantage of assisting in the regeneration of the particulate filter (Rao; Col. 3, Lines 5-25).

11. Regarding claim 4, the modified Carberry discloses the system of claim 1, as described in rejecting claims 5 and 6 above, and further wherein the depollution means comprises a NOx trap (Rao; Abstract – metal oxide).

12. With regards to claims 11-13, Carberry discloses the system of claims 4-6, as described above, which contain all of the essential elements of the instant claims. The method to so perform is inherently included.

Response to Arguments

13. Applicant's arguments filed 4/23/08 have been fully considered but they are not persuasive. Applicant has argues that Carberry does not disclose the post injection being interrupted or reduced after a predetermined maximum duration of application. The examiner respectfully disagrees. Carberry teaches to immediately stop the temperature raising procedure (which includes post injection) after a temperature threshold has been reached (Carberry; Fig. 3, Step 80). This temperature threshold allows for the temperature raise event to only occur for a particular duration and therefor reads on the claimed language.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LOREN C. EDWARDS whose telephone number is (571)272-2756. The examiner can normally be reached on M-TH 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas E. Denion/
Supervisory Patent Examiner, Art Unit 3748

/Loren Edwards/

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